

Appl. No. 09/741,807
Amendment Dated August 29, 2005
Reply to Office Action of May 27, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An apparatus comprising:
 - a transformer to transform a message from a first format to a second format, the first format comprising a first XML format defining a first document type, the second format comprising a second XML format defining the first document type;
 - a switch to switch the transformed message to a selected processing node; and
 - a message director to connect to the transformer and the switch, the message director to make a switching decision for the message based upon application data in the message, and output the switching decision to the switch.
2. (Original) The apparatus of claim 1 wherein the apparatus comprises a transforming switch.
3. (Canceled)
4. (Original) The apparatus of claim 1 wherein the transformer selects a transformation template to transform the message based on one or more of the following in the message matching a predetermined pattern or value:
 - an address and/or port number in the message;

a request line or an identification of an application to process a portion of the message;

a root element or a root tag or other information that describes the content of the message;

a validation template or a reference to a validation template;

one or more XML tags; and

business transaction information.

5. (Previously Presented) The apparatus of claim 4 wherein if the message is transformed based on the validation template or a reference to a validation template then said validation template comprises either a Document Type Definition (DTD) or a schema.

6. (Original) The apparatus of claim 1 wherein the apparatus is a transforming switch coupled between a network and a plurality of servers or processing nodes.

7. (Canceled)

8. (Original) The apparatus of claim 1 wherein the transformer transforms the message from one or more of the following:

HTML to XML;

XML to HTML;

XML to EDI;

EDI to XML;
XML to ASCII flat file;
ASCII flat file to XML;
ASCII flat file to EDI; and
EDI to ASCII flat file.

9. (Original) The apparatus of claim 1 and further comprising a security accelerator to encrypt and/or decrypt messages.

10. (Original) The apparatus of claim 1 and further comprising a validator coupled to the transformer to validate received messages based on one or more validation templates.

11-20. (Canceled)

21. (Currently Amended) A method comprising:
receiving a message;
determining if a transformation should be performed on the message;
performing the following if the transform should be performed:
identifying a transform template, based upon a first portion of the message, to be used to transform the message; and
transforming the message from a first format to a second format using the identified transform template, the first format comprising a first XML format

defining a first document type, the second format comprising a second XML
format defining the first document type; and
switching the message, based upon a second portion of the message, to a selected server or processing node.

22. (Canceled)

23. (Previously Presented) The method of claim 21 wherein the first portion of the message comprises one or more of the following:

an address and/or port number in the message;
a request line or an identification of an application to process a portion of the message;
a root element or a root tag or other information that describes the content of the message;
a validation template or a reference to a validation template;
one or more XML tags; and
business transaction information.

24. (Previously Presented) The method of claim 21 wherein the second portion of the message comprises one or more of the following:

an address and/or port number in the message;
a request line or an identification of an application to process a portion of the message;

a root element or a root tag or other information that describes the content of the message;

a validation template or a reference to a validation template;
one or more XML tags; and
business transaction information.

25. (Currently Amended) A method comprising:

receiving a message;

determining if a transformation should be performed on the message;

performing the following if the transform should be performed:

identifying a transform template to be used to transform the message, the identifying based upon a root element or a root tag or other information that describes the content of the message, and/or a validation template or a reference to a validation template;

transforming the message from a first format to a second format using the identified transform template, the first format comprising a first XML format defining a first document type, the second format comprising a second XML format defining the first document type; and

switching the message to a selected server or processing node based upon a portion of the message.

26. (Original) The method of claim 25 and further comprising validating the received message.

27. (Original) The method of claim 26 and wherein the validating comprises either removing validation instructions from the message and/or adding an indication that the message has been pre-validated.

28. (Original) The method of claim 25 wherein the switching comprises switching the message to a selected server or processing node based on tags and/or business transaction information within the message.

29. (Currently Amended) An apparatus comprising a media having instructions thereon, the instructions resulting in the following when executed:

receiving a message;
determining if the message should be transformed;
performing the following if the message should be transformed:
identifying a transform template to be used to transform the message based on a first portion of the message; and
transforming the message from a first format to a second format using the identified transform template, the first format comprising a first XML format defining a first document type, the second format comprising a second XML format defining the first document type; and
switching the message to a selected server or processing node based on a second portion of said message.

30-37. (Canceled)